

IN THE CLAIMS

Please amend the claims as follows:

1. (previously amended) A method for processing a plurality of channels, the method comprising the steps of
selecting a channel from the plurality of channels;
receiving a signal associated with the selected channel;
marking the selected channel as a digital signal if the intermediate frequency of the selected channel is similar to a nominal frequency for a digital signal;
marking the selected channel as an analog signal if the intermediate frequency of the selected channel is similar to a nominal frequency for an analog signal;
storing information indicative of whether the selected channel is marked as a digital or analog channel; and
repeating said selecting, receiving, digital channel marked, analog channel marked and storing steps until each of the plurality of channels have been selected.
2. (Original) The method of claim 1 wherein the information associated with the selected channel is stored into a memory unit.
3. (Original) The method of claim 1 wherein said digital channel determining step further comprises the steps of:
determining that the received signal is a digital baseband signal;
receiving synchronization and error check signals from the received signal;
determining whether the generated synchronization and error check signals are proper for a digital television signal; and
marking the selected channel as digital if the synchronization and error check signals are proper.

4. (Original) The method of claim 3 wherein the synchronization signals comprise a Carrier Lock signal and a Segment Lock signal.

5. (Original) The method of claim 3 wherein the error check signals comprise a Forward Error Correction (FEC) signal and a Reed Solomon Error Rate signal.

6. (previously presented) The method of claim 1 wherein said analog channel marking step further comprises the steps of:

- determining that the received signal is an analog baseband signal;
- determining whether a video carrier of the analog baseband signal is automatically fine tuned;
- determining whether a video synchronization signal is detected;
- marking the channel as analog if the video carrier is automatically fine tuned and the video synchronization signal is detected.

7. (Original) The method of claim 6 wherein said video synchronization is a composite SYNC signal having a vertical synchronization signal and a horizontal synchronization signal.

8. (currently amended) An apparatus for automatically programming information associated with a plurality of channels, the apparatus comprising:

- a tuner for converting a radio frequency (RF) signal associated with each of the plurality of channels into an intermediate frequency (IF) signal;
- a digital signal converter, coupled to said tuner, for demodulating the IF signal into a baseband digital signal [and generating synchronization and error correction signals from the baseband digital signal];

an analog signal converter, coupled to said tuner, for demodulating the IF signal into a baseband analog signal [and generating tuning and synchronization signals from the baseband analog signal];

a video processor, coupled to said digital and analog signal converters, for processing video and audio components of the baseband digital and analog signals to an output device;

a memory unit for storing auto-programming software and information associated with each of the plurality of channels; and

a microprocessor, coupled to said digital signal converter, said analog signal converter, said tuner and said memory unit, for controlling said tuner, receiving signals from said analog and digital signal converters, executing auto-programming software, [marking the type of channel for each of the plurality of channels] marking the received signals as a digital signal if the intermediate frequency of the selected channel is similar to a nominal frequency for a digital signal and an analog signal if the intermediate frequency of the selected channel is similar to a nominal frequency for an analog signal;

and storing information about the type of channel for each of the plurality of channels into said memory unit.

9. (Original) The apparatus of claim 8 wherein said digital signal converter comprises:

a digital demodulator for demodulating the IF signal into a digital baseband signal and generating synchronization signals;

a forward error correction (FEC) module, coupled to said digital demodulator, for generating error correction signals; and

a digital signal processor, coupled to said FEC module, for separating the digital baseband signal into video and audio components.

10. (Original) The apparatus of claim 8 wherein the analog signal converter comprises:

an analog demodulator for demodulating the IF signal into an analog baseband signal and generating tuning signals; and

an analog signal processor, coupled to said analog demodulator, for generating video synchronization signals and separating the analog baseband signal into video and audio components.

11. (Original) The apparatus of claim 8 wherein said microprocessor determines the type of channel by executing autoprogramming software stored in said memory unit.

12. (Previously presented) The apparatus of claim 8 wherein the synchronization signals comprise a Carrier Lock signal and a Segment Lock signal.

13. (Previously presented) The apparatus of claim 8 wherein the error correction signals comprise FEC Lock and Reed Solomon Error Rate signals.

14. (previously presented) A computer readable medium storing a software program that, when executed by a computer, causes the computer to perform a method comprising:

selecting a channel from the plurality of channels;

receiving a signal associated with the selected channel;

marking the selected channel as a digital signal if the frequency of the selected channel is similar to a nominal frequency for a digital signal;

marking the selected channel as an analog signal if the frequency of the selected channel is similar to a nominal frequency for an analog signal

storing information indicative of whether the selected channel is marked as an analog or digital channel; and

repeating said selecting, receiving, digital channel determining, analog channel determining and storing steps until each of the plurality of channels have been selected.

15. (Original) The computer readable medium of claim 14 wherein said digital channel determining step further comprises the steps of:

determining that the received signal is a digital baseband signal;
receiving synchronization and error check signals from the received signal;
determining whether the generated synchronization and error check signals are proper for a digital television signal; and
marking the selected channel as digital if the synchronization and error check signals are proper.

16. (Original) The computer readable medium of claim 14 wherein said analog channel

determining step further comprises the steps of:
determining that the received signal is an analog baseband signal;
determining whether a video carrier of the analog baseband signal is automatically fine tuned;
determining whether a video synchronization signal is detected;
marking the channel as analog if the video carrier is automatically fine tuned and the video synchronization signal is detected.